

=> b casre  
FILE 'CASREACT' ENTERED AT 18:10:04 ON 08 APR 2008  
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FILE CONTENT:1840 - 5 Apr 2008 VOL 148 ISS 15

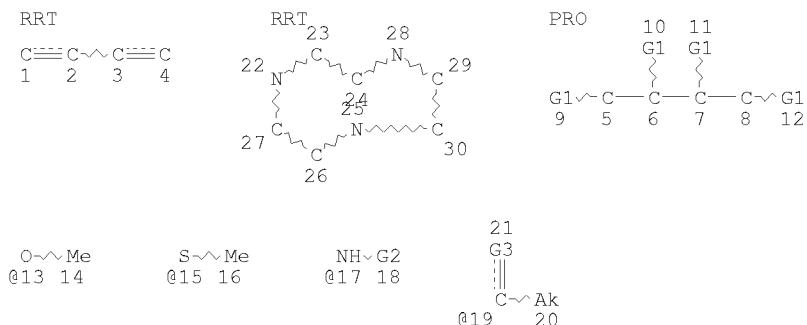
New CAS Information Use Policies, enter HELP USAGETERMS for details.

\*\*\*\*\*  
\* \*  
\* CASREACT now has more than 13.8 million reactions \*  
\* \*\*\*\*\*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que sta 19  
L7 STR



VAR G1=OH/SH/13/15/17/NH2

VAR G2=AK/CHO/19

VAR G3=O/S

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L9 0 SEA FILE=CASREACT SSS FUL L7 ( 0 REACTIONS)

100.0% DONE 33643 VERIFIED 0 HIT RXNS 0 DOCS  
SEARCH TIME: 00.00.04

=> b reg  
FILE 'REGISTRY' ENTERED AT 18:10:09 ON 08 APR 2008  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 APR 2008 HIGHEST RN 1012704-12-9

DICTIONARY FILE UPDATES: 7 APR 2008 HIGHEST RN 1012704-12-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

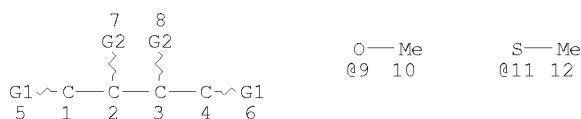
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que sta l12  
L10 STR



VAR G1=SH/11

VAR G2=OH/9

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1  
CONNECT IS M1 RC AT 2  
CONNECT IS M1 RC AT 3  
CONNECT IS M1 RC AT 4  
DEFAULT MLEVEL IS ATOM  
DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L12 71 SEA FILE=REGISTRY SSS FUL L10

100.0% PROCESSED 431877 ITERATIONS 71 ANSWERS  
SEARCH TIME: 00.00.02

=> b hcap  
FILE 'HCAPLUS' ENTERED AT 18:10:15 ON 08 APR 2008  
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FILE COVERS 1907 - 8 Apr 2008 VOL 148 ISS 15  
FILE LAST UPDATED: 7 Apr 2008 (20080407/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs 11 tot



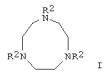


10 / 579714

=> d bib abs hitstr 137 tot

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:324131 HCAPLUS  
 DN 142:373670  
 TI Method for the preparation of bisepoxides from conjugated dienes using peroxides and manganese catalysts in the presence of cyclic amine ligands.  
 IN Buehler, Holger; Teles, Joaquim Henrique; Pabst, Gunther; Taeger, Tilman Lueddeke  
 PA BASF Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 23 pp.  
 COOPER, PIXXD2  
 DT Patent  
 LA German  
 FAN,CNT 1

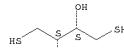
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO--2005033070	A2	20050414	2004WO-EP0010123	20040910 <-
WO--2005033070	A3	20050623		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BE, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GR, HK, HU, IE, IL, IN, IS, IT, KE, KR, KZ, LC, LV, LR, LS, LZ, LU, MY, NL, NO, MK, PR, RW, MX, BY, PT, SE, NL, NO, NZ, OM, PG, PH, PL, PT, RO, PU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE----10343252	A1	20050421	2003DE-100043252	20030917 <-
EP----1663964	A2	20050623	2004EP-0000765502	20040910 <-
R: BG, CH, DE, DK, ES, FR, GB, GR, IE, IL, LU, NL, SE, MC, PI, IR, SI, FI, RO, CY, TR, BG, C2, EE, HU, PL, SK				
CN----3852892	A	20061025	2004CN-080026990	20040910 <-
BR----2004014391	A	20061121	2004BR-000014391	20040910 <-
EP----1801099	A1	20070627	2007EP-000010419	20040910 <-
R: BG, CH, CL, DE, DK, ES, FR, PT, RO, SE, SI, SK, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, FR, GB, GR, HU, IE, CN----103037407	A	20070919	2007CN-010104781	20040910 <-
US-20060277687	A1	20061214	2006US-000571772	20060315 <-
PRAI 2004CN-100043252	A	20030911		
2004CN-000765502	A3	20040910		
2004EP-000765052	A3	20040910		
2004WO-EP0010123	W	20040910		
OS MARPAT 142:373670				
GI				



AB A method for the production of bisepoxides comprises treatment of conjugated dienes  $\text{H}_2\text{C}=\text{CH}-\text{CHR}_1$  ( $\text{R}_1 = \text{H}$ , alkyl, hydroxymethyl, mercaptalkyl) with  $\geq 1$  mole peroxide at  $\leq 4$  equivalent of peroxide per double bond, in the presence of a catalyst, obtained by bringing into contact  $\geq 1$  mole of  $\text{A}2\text{MnX}_4$  ( $\text{X} = \text{H}, \text{MnX}_3$  (X = trivalent anion), divalent anion; A = alkali metal cations) alkoxoalane with  $\geq 1$  mole of triazacyclonanone ligand (I:  $\text{R}_2 = \text{alkyl}$ ) and  $\geq 1$  co-ligand derived from mono-, di-, or poly-carboxylic acids or diamines. Thus, 1,3-butadiene, 1,4,7-trimethyl-1,4,7-triazacyclonanone, manganese dicarbonate, NaOAc, oxalic acid, and MeOH were autoclaved in MeCN at room temperature to give a 54% yield of a 2,2-bisoxiran solution containing vinylloxiran impurity. The solution was autoclaved with NaOH in MeOH to give a solution comprising 40 mol% erythro- and 60 mol% threo-1,4-dimercaptobutane-2,3-diol. The mixture was used in preparation of dehaired cattle hides.

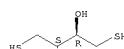
L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 IT 3483-12-3P, threo-1,4-Dimercaptobutane-2,3-diol 6892-68-8P  
 , erythro-1,4-Dimercaptobutane-2,3-diol  
 RL: Adm (Agricultural uses); IMF (Industrial manufacture);  
 S: Synthetic preparation; BTOL (Biological study); PREP  
 (Preparation); USES (Uses)  
 (Preparation) of bisepoxides from conjugated dienes using peroxides and manganese catalysts in presence of cyclic amine ligands  
 RN 3483-12-3 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



RN 6892-68-8 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.



10 / 579714

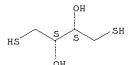
=> d bib abs hitind hitstr 142 tot



142 ANSWER 4 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN  
 AN 2003:931541 HCPLUS  
 DN 139:397165  
 TI Method for removing horn-like substance from skins,  
 pelts, or furs  
 IN Faeger, Tilman Lueddecke; Pabst, Gunther; Lamalle, Philippe; Hueffer,  
 Stephan; Schroeder, Stefan  
 PA Basf Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 PI WO-2003097980 A1 20031127 2003WO-EP0005221 20030519 <-  
 W: AE, AG, AL, AM, AJ, AU, AS, BA, BS, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DU, DN, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KE, LC, LK, LR,  
 LS, LT, LU, LV, MA, ME, MG, MN, MM, MX, MZ, NO, NZ, OM,  
 PH, PL, PT, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TZ,  
 TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RM: GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BE, BJ, CF, CG, CI, CM, GN, GO, GA, ML, NE, SN, TD, TR, TZ  
 AU-2003232797 A1 20031202 2003AU-000232797 20030519 <-  
 EP----1511865 A2 20050309 2003EP-000752667 20030519 <-  
 R: AZ, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MR, CY, AL, TR, BE, ER, HU, SE  
 BR-2003011316 A 20050215 2003BR-00011316 20030519 <-  
 CN----1653195 A 20050810 2003CN-000811342 20030519 <-  
 JP-20055221650 T 20051020 2004JP-000505393 20030519 <-  
 US-20050229226 A1 20051020 2004US-000513800 20041118 <-  
 PRA1 2002DE-100023012 A 20020522 <-  
 A 20020522 20020522 <-  
 OS MAPAT 139:397165  
 AB Disclosed is a method for removing horn-like substances from skins  
 , pelts, or furs of dead animals by treating in an aqueous liquor  
 comprising one or several  $\text{XICH}_2\text{CH}_2\text{CH}_2\text{NH}_2\text{XAR}_1$  or the corresponding  
 alkali metal salt thereof, where  $\text{X}$  is selected among hydrogen, phosphonium  
 salts thereof, in which the variables are defined as follows:  $\text{R}_1$  is  
 selected among hydrogen or  $\text{Cl}-\text{C}_2$  alkyl, which is unsubstituted or  
 substituted with one or several SH group/s or OH group/s;  $\text{X}_1$  to  $\text{X}_4$  are  
 identical or different, being selected among hydrogen,  $\text{C}_1-\text{C}_4$  alkyl, OH,  
 SH, NH, NR<sub>2</sub>, R<sub>2</sub> represents hydroxy,  $\text{C}_1-\text{C}_4$  alkyl, or a  
 alkylcarboxyl group; at least one radical  $\text{X}_1$  to  $\text{X}_4$  represents SH if  $\text{R}_1$   
 contains at least one sulfur atom, while at least two radicals  $\text{X}_1$  to  $\text{X}_4$   
 represents SH if  $\text{R}_1$  contains no sulfur atom. These compds. such as  
 rac-dithiothreitol provide leather with less swelling in subsequent  
 processing.  
 ICM: CIAC-001/06  
 CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
 ST aliph thiol remover horn like substance hide; dithiothreitol remover horn  
 like substance hide; alc thiol aliph remover keratin hide;  
 Phosphonium salt aliph thiol remover keratin hide; ammonium salt  
 aliph thiol remover keratin hide; metal salt aliph thiol remover  
 keratin hide  
 IT Hide  
 (removing horn-like substances from skins, pelts,  
 or furs by aliphatic thiols optionally containing hydroxy groups or their  
 salts) 2003-12-3  
 IT 2483-12-3, rac-Dithiothreitol  
 PL: NUU (Other use, unclassified); USES (Uses)  
 (removing horn-like substances from skins, pelts,  
 or furs by aliphatic thiols optionally containing hydroxy groups or their  
 salts) 2003-12-3  
 IT 2483-12-3, rac-Dithiothreitol  
 PL: NUU (Other use, unclassified); USES (Uses)  
 (removing horn-like substances from skins, pelts,  
 or furs by aliphatic thiols optionally containing hydroxy groups or their

142 ANSWER 4 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 3403-12-3 HCPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

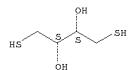


RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

142 ANSWER 5 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN  
 AN 2002:927569 HCPLUS  
 DN 138:21787  
 TI Production of pluripotent mammalian stem cells by somatic cell  
 reprogramming  
 IN Johnson, Penelope Ann; Wolowacz, Richard Gregory  
 PA Intercyte Limited, UK  
 SO PCT Int. Appl., 90 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 PI WO-2003097065 A1 20031205 2003WO-GB0002691 20020531 <-  
 WO-2003097065 A2 20030320 <-  
 W: AE, AG, AL, AM, AJ, AU, AS, BA, BS, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DU, DN, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KE, LC, LK, LR,  
 LS, LT, LU, LV, MA, ME, MG, MN, MM, MX, MZ, NO, NZ, OM, PH,  
 PT, PL, PR, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RM: GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BE, BJ, CF, CG, CI, CM, GA, GN, GO, GM, ML, MR, NE, SN, TD, TR  
 AU-2003021618 A1 20030216 2003AU-00052819 20020531 <-  
 EP-14202004 A2 20040311 2003EP-00073051 20020531 <-  
 R: AZ, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MR, CY, AL, TR  
 US-2004024183B A1 20041202 2003US-000479342 20031201 <-  
 2003US-000479342 A 20040531 <-  
 2003WO-GB0002691 W 20030320 <-  
 AB The invention concerns methods of producing pluripotent mammalian stem  
 cells by reprogramming somatic cells, as well as stem cells obtained by  
 the methods, and uses of these stem cells. In one aspect, a method of  
 producing a stem cell, target cell, or a target mammalian somatic cell involves  
 introducing into the target cell a medium which contains a mixture of a  
 whole, partial or derivative extract of a reprogramming cell, wherein the extract  
 comprises soluble components of cytoplasm and nuclear factors and wherein the  
 extract is enriched for the nuclear factors.  
 IC ICM: CIAC-001/06  
 CC 45-1 (Biomedical Methods)  
 Section cross-reference(s): 63  
 II Skin  
 (epidermis; production of pluripotent mammalian stem cells by somatic cell  
 reprogramming)  
 IT Animal tissue culture  
 Antioxidants  
 Bone  
 Cartilage  
 Cell culture  
 Cell nucleus  
 Cell proliferation  
 Culture media  
 Drug screening  
 Egg  
 Gamete and Germ cell  
 Heart  
 Hematopoietic precursor cell  
 Homogenization  
 Human  
 Intestine  
 Kidney  
 Liver  
 Mammalia  
 Mitosis  
 Muscle  
 Respiratory system  
 Skin  
 sonication  
 Spleen  
 Stem cell  
 Stock  
 Transplant and Transplantation  
 (production of pluripotent mammalian stem cells by somatic cell

L42 ANSWER 9 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN (Continued)  
reprogramming)  
IT 56-65-5, ATP, biological studies 56-81-5, Glycerol, biological studies  
57-51-1, Sucrose, biological studies 57-24-2, 2-Mercaptoethanol  
67-37-0, Creatine phosphate 86-01-1, CIP 3483-12-3  
Dithiothreitol 7784-30-3, Magnesium chloride (MgCl<sub>2</sub>), biological studies  
9001-35-4, Creatine kinase 17181-54-3, β-Glycerophosphate  
31430-18-9, Nocodazole 37353-31-4, Vanadate  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(production of pluripotent mammalian stem cells by somatic cell  
reprogramming)  
IT 3483-12-3, Dithiothreitol  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(production of pluripotent mammalian stem cells by somatic cell  
reprogramming)  
RN 3483-12-3 HCPLUS  
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



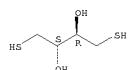
L42 ANSWER 6 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN (Continued)  
AN 2002:695739 HCPLUS  
DN 137:221760  
TI A composition containing hair coloring compositions  
IN Shangalakshmi, Krishnaswami; Mani, Indu; Raman, Govindarajan  
PA Unilever PLC; Unilever NV; Hindustan Lever Limited  
SO PCT Int. Appl.; 28 PP.  
CODEN: PIXXD2  
DT Patents  
LA English  
PAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
PI WO-2002069921 A1 20020912 2002WO-EP0002344 20020228 <-  
W: AE, AR, AT, BE, BG, BY, CA, CH, CL, CR, CU, DE, DK, DM, DZ, ES, FR, GB, GD, GR, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TN, TR, TI, TZ,  
UA, VN, ZA, ZM  
RN: GM, KE, BR, CO, CR, DO, SL, SZ, TZ, UG, ZM, ZW, AZ, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BE, BJ, CF, CG, CI, CR, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG  
IN-2001MU00229 A 2005050 2001IN-MU0000229 20010307 <-  
AU-2002A000243 A 20020919 2002AU-000256643 20020228 <-  
US-2002016612 A1 20021119 2002US-009091151 20020305 <-  
US-5-6760677 B2 20040316  
PRA1 2001IN-MU000229 A 20010307 <-  
2001GB-000009533 A 20010418 <-  
2001GB-000002314 A 20010228 <-  
AB A coloring system for hair and/or skin comprises at least three sep.  
packaged components: (a) a thi compound capable of breaking the S-S bond  
between cysteine residues, and an alkaline reagent; (b) a material and/or extract  
obtainable from the Mucuna plant; and (c) an oxidizing agent.  
IC ICM A61K-007/13  
L01K-001/48  
CC 62-3 (Essential Oils and Cosmetics)  
IT Areca catechu  
Humectants  
Lawsonia inermis  
Oxidizing agents  
Perfumes  
Preservatives  
Ribes uva-crispa  
Skin  
Stabilizing agents  
Tamarindus indica  
Thickening agents  
(coloring system for hair and skin containing thi compound, Mucuna extract and  
oxidizing agent)  
IT 67-64-1, Sulfuric acid, biological studies 59-92-7, DOPA, biological  
studies 66-11-1, Thioglycolic acid, biological studies 112-10-7,  
Isopropyl stearate 112-32-5, Stearyl alcohol 142-56-6, Isopropyl  
palmitate 143-28-2, Oleyl alcohol 1310-56-3, Potassium hydroxide,  
biological studies 1310-73-2, Sodium hydroxide, biological studies  
313-13-3, Dimethylsulfone 682-68-6, Dithioerythritol  
766-41-1, Ammonium, biological uses 7681-57-4, Sodium metabisulfite  
7757-83-7, Sodium sulfite 9002-98-6 9016-00-6, Dimethylpolysiloxane  
31566-31-1, Glyceryl monostearate  
RL: COS (Cosmetic use); BIOL (Biological study); USES  
(Uses)  
(coloring system for hair and skin containing thi compound, Mucuna extract and  
oxidizing agent)  
IT 3483-12-3, Dithiothreitol 6892-68-8, Dithioerythritol  
RL: COS (Cosmetic use); BIOL (Biological study); USES  
(Uses)  
(coloring system for hair and skin containing thi compound, Mucuna extract and  
oxidizing agent)  
RN 3483-12-3 HCPLUS  
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

L42 ANSWER 6 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Relative stereochemistry.



RN 6892-68-8 HCPLUS  
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

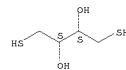
Relative stereochemistry.



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

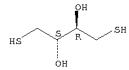
L42 ANSWER 7 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:286138 HCPLUS  
DN 136:314747  
TI Acquisition of hair proteins for hair diagnosis and production of  
medicinal and chemical materials  
IN Fujii, Toshihiro  
PA Ueda, Seni Kagaku Shinkokai, Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
PAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
PI JP-2002114798 A 20020416 2000JP-000345893 20001006 <-  
PRA1 2000JP-000345893 20000106 <-  
AB The invention relates to an efficient method for acquisition of hair  
proteins suitable for use in diagnosis of hair, and production of medicinal  
and chemical material, wherein the method includes treatment of hair with a  
mixture solution containing an reducing agent, urea, and thiourea to elute and  
collect keratin protein from the hair, and collection of shape-remained cuticle from the  
residue. Keratin protein was collected from human hair by  
treating the hair with a solution containing urea 10, thiourea 10,  
2-mercaptoethanol 5, and 25 mM Tris-HCl buffer (pH 8.5) balance to 100 %  
for 2 days at 37°C. A hair gel containing keratin protein  
obtained from sheep wool 1% was also prepared  
IC ICM C07K-001/14  
ICS C07K-014/47; A61K-007/06; A61K-007/07; A61K-007/08  
CC 62-3 (Essential Oils and Cosmetics)  
Sauvage croissant (Sauvage)  
ST Hair protein acquisition urea thiourea reducing agent; keratin  
protein extrn urea thiourea mercaptocethanol  
II Keratins  
Proteins  
PRC (Physical, engineering or chemical process);  
PUR (Purification or recovery); BIOL (Biological study); PREP  
(Preparation); PROC (Process); USES (Uses)  
IT 57-13-6, Urea, uses 60-24-2, 2-Mercaptoethanol 62-56-6, Thiourea, uses  
68-00-0, Thioglycolic acid 68-00-0, 3483-12-3, Dithiothreitol  
RL: NUU (Other use, unclassified); USES (Uses)  
(acquisition of hair proteins with reducing agent, urea, and thiourea)  
IT 3483-12-3, Dithiothreitol  
RL: NUU (Other use, unclassified); USES (Uses)  
(acquisition of hair proteins with reducing agent, urea, and thiourea)  
RN 3483-12-3 HCPLUS  
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.





142 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

PATENT NO.						KIND	DATE	APPLICATION NO.	DATE
WO-2001030362	A2	20010503	2000WU-US0029500	20001026	<--				
WO-2001030362	A3	20020117							
W: AE AG AL AR AI AU AS BA BE BG BR BY BE CA CH CN CR CU CZ DE DK DM DE EE ES FI GB GD GE GH GM HR HU ID IL IN IS JK KE KG KP KR LZ LR LS LT LU LV MA MD MG MN MW MX MZ NO NZ PL PT RO RU SD SI SK SL TJ TM TR TZ UA UG US UZ VN YU SA SW									
RW: GM GM KE LS MW ME SD SL SZ TZ UG ZW AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CL CM GA GN GW ML MR NE SN TD TG									
US-4-6704331 A1 20010802 2000US-000636791 20001025 <--									
CA-238924 A1 20010303 2000CA-00238924 20001026 <--									
EP-1223950 AZ 20020724 2000EP-000973399 20001026 <--									
EP-1223950 B3 20060104 R: AZ BE CH DE DK ES FR GB GR IT LI LU NL SE MC PT, IE SI LT DV FI RG MK CY									
JP-2002030362 A3 20020114 2002JP-000532780 20001026 <--									
AU-781151 B2 20050512 2001AU-000013456 20001026 <--									
AT-314856 T 20060215 2000AT-000975399 20001026 <--									
EP-1676915 A2 20060705 2005EP-00028449 20001026 <--									
R: AZ BE CH DE DK ES FR GB GR IT LI LU NL SE MC PT, IE SI LT DV FI RG MK CY									
US-20060178326 A1 20060810 2004US-000753718 20040108 <--									
AU-2005203307 A3 20050825 2005AU-000203307 20050727 <--									
PRA1 1999US5-00161532P P 19991026 <--									
A999US5-00161532P A3 20001026 <--									
2000AU-000975399 A 20001026 <--									
2000EP-000975399 A3 20001026 <--									
2000WU-US0029500 W 20001026 <--									
AB: As an effective therapy for proliferative skin and eye diseases, e.g. psoriasis and proliferative diabetic retinopathy, the invention provides ribozyme or antisense ribozyme derived systems which cleave RNA encoding cytokines involved in inflammatory matrix metalloproteinases, a cyclin, a cell-cycle dependent kinase, a growth factor, or a reductase.									
IC: A61K-031/713									
ICS: C12N-015/11; C12N-009/00; C07H-021/00; A61P-017/00; A61P-027/02									
CC: 1-12 (Biological activity); 1-12 (Pharmacology); citation cross-referenc(s): 63									
IT: Skin, neoplasm (basal cell carcinoma, inhibitors; ribozyme for treatment of proliferative skin and eye diseases)									
IT: Skin, disease (hypertrophic scar, burn; ribozyme for treatment of proliferative skin and eye diseases)									
IT: Skin, disease (proliferative; ribozyme for treatment of proliferative skin and eye diseases)									
IT: Skin, disease (scar; ribozyme for treatment of proliferative skin and eye diseases)									
IT: Skin, disease (seborrheic wart; ribozyme for treatment of proliferative skin and eye diseases)									
IT: 1S1-2S1 Sodium dodecyl sulfate, biological studies 3483-12-3, Dithiothreitol 4431-00-9, Arachidicarboxylic acid 7722-84-1, Hydrogen peroxide, biological studies									
PL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological)									

142 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
study); USES (Uses)  
(ribozyme for treatment of proliferative skin and eye diseases)

IT: 3483-12-3, Dithiothreitol

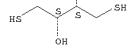
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study); USES (Uses); BIOL (Biological study); THU (Therapeutic use);

RN: 3483-12-3 HCAPLUS

CN: 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



PATENT NO.						KIND	DATE	APPLICATION NO.	DATE
WO-2000064271	A1	20001102	2000WU-US0011289	20000426	<--				
W: CA									
RW: AZ BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE									
US-20020081564 A1 20020627 2001US-000933680 20010822 <--									
US-68612111 B2 20050301 20050301 <--									
PRA1 1999US5-00131252P P 19990423 <--									
A999US5-00131252P A3 20001026 <--									
AB: The invention relates to methods of stabilizing glycosaminoglycans in a biol, tissue (e.g., a bioprosthetic implant) in conjunction with crosslinking of protein in the tissue. The methods of the invention improve the integrity of the device and improves its stability in vivo. The inventors also include biol tissues having stabilized glycosaminoglycans and crosslinked proteins and kits for preparing such tissues. An example is given of crosslinking of type I collagen and radiolabeled hyaluronic acid.									
IC: A61F-002/04									
ICS: A61F-002/08; A61F-002/24; A61F-002/30; A61L-033/04; C07K-001/00									
CC: 1-7 (Pharmaceuticals)									
IT: Bladder Blood vessel Blood vessel Cartilage Connective tissue Skin Skin Tendon Tendon transplant: stabilization of implantable bioprosthetic devices)									
IT: 111-90-8 Glucaraldehyde 3483-12-3, Dithiothreitol									
PL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (stabilization of implantable bioprosthetic devices)									
IT: 3483-12-3, Dithiothreitol									
PL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (stabilization of implantable bioprosthetic devices)									
RN: 3483-12-3 HCAPLUS									
CN: 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)									
Relative stereochemistry.									

IT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN

AN 2000:383881 HCAPLUS

DN 133:22147

TI Agents for permanently shaping keratin fibers  
IN Borchardt, Ulrich; Blankenburg, Guenter; Wolfram, Leszek J.; Poppe,  
Elisabeth

PA Hans Schwarzkopf G.m.b.H. &amp; Co. K.-G., Germany

SO PCT Int. Appl., 28 pp.

COUN: PIXXD2

DP Patent

LA German

FAN,CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO--2000021156 A1 20000608 1999WO-EP0009010 19991123 &lt;--

W JP US

RN: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

DE--19855606 A1 20000608 1998DE-100055606 19981202 &lt;--

PRAI 1998DE-100055606 A A 19981202 &lt;--

AB An aqueous hair-waving composition (pH 6-9.5) containing 21 water-soluble sulfite, bisulfite, or H sulfate in the form of their alkali metal, alkaline earth, or ammonium salts in an amount of 2-15 weight%, 21 thio compound 0.01-5 weight%, and 21 protein derivative causes minimal damage to the hair while having a good waving effect. A suitable composition contained 70% aqueous NH4HSO3 11.3%; sea 25, Triton X-100 1, cysteine-HCl, H2O 2.9, Croquat WEP (keratin hydrolyzate) 2, 33% NaOH solution to pH 8, and H2O to 100 weight%.

IC ICM A61K-007/09

CC 62 (Essential Oils and Cosmetics)

IT Bisulfites

Proteins, general, biological studies

Sulfites

Thiols (organic), biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(agents for permanently shaping keratin fibers)

IT Keratins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hydrolyzates, agents for permanently shaping keratin fibers)

IT Hair preparations

(permanent wave; agents for permanently shaping keratin fibers)

IT Protein hydrolyzates

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(quaternized; agents for permanently shaping keratin fibers)

IT 52-89-1 52-90-4, L-Cysteine, biological studies 60-23-1, Cysteamine

70-18-8, Glutathione, biological studies 3483-12-3, Dithiothreitol 10192-30-0, Ammonium hydrogen sulfate

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(agents for permanently shaping keratin fibers)

IT 3483-12-3, Dithiothreitol

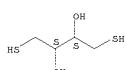
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(agents for permanently shaping keratin fibers)

RN 3483-12-3 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

L42 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN (Continued)  
RE,CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN

AN 1999:440750 HCAPLUS

DN 131:215274

TI Clarity of films from wool keratin

AU Polatich, Attila E.; Houssard, Catherine; Camirand, Wayne; Robertson,

George

CS USDA, Western Regional Research Center, Albany, CA, 94710, USA

SO Textile Research Journal (1999), 69(7), 539-541

CODEN: TRJQA9; ISSN: 0040-5175

PB Textile Research Institute

DT Journal

LA English

AB The keratin in wool is a highly crosslinked protein. The high mol. weight, crosslinked structure prevents its shaping into films without extensive decomposition. Since the crosslinks are -S-S- bridges, reducing agents can reduce the film, resulting in a clear, transparent film of lower mol. weight polymers. In this work, the fibers are pretreated with an aqueous solution of various reducing agents to open the disulfide bonds, and then pressed into films at 130-150°C and pressures of 41.7-66.7 MPa in a hydraulic press. The optimum conditions to obtain clear, transparent films include using NaHSO3 in aqueous solution 1 min. before pressing 135°C and 55.6 MPa.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 40

ST wool keratin film transparency

IT Plastic films

Transparency

Wool

(transparency of films from reduction and pressing of wool keratin )

IT Keratins

RL: PRP (Properties); IEM (Technical or engineered material use); USES (Uses)

(transparency of films from reduction and pressing of wool keratin )

IT 3483-12-3, DTT 7631-90-5, Sodium bisulfite 7757-83-7, Sodium

sulfite 7772-98-7, Sodium hyposulfite 16731-55-6, Potassium

pyrosulfite 100-51-6

RL: NNU (Other use, unclassified); USES (Uses)

(reducing agent; transparency of films from reduction and pressing of wool keratin )

IT 3483-12-3, DTT

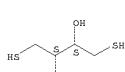
RL: NNU (Other use, unclassified); USES (Uses)

(reducing agent; transparency of films from reduction and pressing of wool keratin )

RN 3483-12-3 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RE,CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN

AN 1999:127708 HCAPLUS

DN 131:68283

TI Redox manipulation of NMDA receptors in vivo: alteration of acute pain transmission and dynorphin-induced allodynia

AU Jangchub, T. M.; Kitto, K. F.; Wilcock, G. L.

CS Department of Pharmacology, University of Minnesota, Minneapolis, MN, 55455, USA

SO Pain (1999), 80(1,2), 37-43

CODEN: PAINB; ISSN: 0304-3959

PB Elsevier Science B.V.

DT Journal

LA English

AB The redox modulatory site of the N-methyl-D-aspartate (NMDA) receptor directly regulates NMDA receptor function. Sulfhydryl reducing agents, such as dithiothreitol (DTT), potentiate NMDA receptor-evoked currents in vitro whereas oxidizing agents, such as 5,5'-dithio-bis-(2-nitrobenzoic acid) (DTNB), attenuate these currents. In this study, the authors examined the effect of this redox manipulations on nociceptive spinal cord signaling in mice. Intrathecal (i.t.) administration of DTT (0.1-30 nmol) reduced the responses of the NMDA receptor-evoked currents and enhanced NMDA-induced nociceptive behaviors, and this enhancement was blocked by the oxidizing agent, DTNB. Pretreatment with DTT (10 nmol, i.t.) enhanced NMDA-induced tail-flick thermal hypersensitivity and intraplantar formalin-induced nociceptive responses. Finally, DTT pretreatment enhanced the long-term potentiation of NMDA receptor-evoked currents of the NMDA receptor by endogenous reducing agents may contribute to acute pain transmission in response to activation by endogenous glutamate. Moreover, blockade of the NMDA receptor-reducing agents or oxidation of the NMDA receptor redox site may prove therapeutically useful in the treatment of chronic pain.

CC 2-(5-Mammalian Hormones)

IT Pain

(Skin, disease; (allodynia; redox manipulation of NMDA receptors in vivo in relation to alteration of acute pain transmission and dynorphin-induced allodynia in mice)

IT 3483-12-3, Dithiothreitol

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dithiothreitol potentiates NMDA receptor evoked currents in vitro whereas oxidizing agent 5,5'-dithio-bis-(2-nitrobenzoic acid) attenuate these currents)

IT 3483-12-3, Dithiothreitol

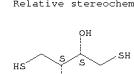
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dithiothreitol potentiates NMDA receptor evoked currents in vitro whereas oxidizing agent 5,5'-dithio-bis-(2-nitrobenzoic acid) attenuate these currents)

RN 3483-12-3 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RE,CNT 6 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:70406 HCAPLUS

DN 130:129770

TI Depilatory compositions, methods for their preparation and their use

IN Gobin, Bruno; Demont, Sarah; Ledon, Philippe; Pires, Veronique

PA Reckitt &amp; Colman France, Fr.; Reckitt &amp; Colman Products Limited

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN,CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO-----9902125	A1	19990121	1998WO-GB0001878	19980626 <-
W:	AT, AU, BA, BE, BG, BR, BY, CH, CL, CN, CU, DE, DK, ES,				
DK, DE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,					
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,					
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TI,					
RW: UA, US, UZ, VN, YU, ZW					
FI, FR, GR, IE, IL, LU, MC, NL, PT, SE, BF, BJ, CG, CI,					
CM, GA, GN, ML, MR, NE, SN, TD, TG					
GB-----2327190	A	19990120	1998GB-000013725	19980626 <-	
GB-----2327190	B	20020417	2001GB-000027115	19980626 <-	
CA-----23941	A1	19990121	1998CA-002296443	19980626 <-	
AU-----12129	A	20020128	1998AU-000081229	19980626 <-	
AU-----755351	B2	20021212			
EP-----1001735	A1	20000524	1998EP-000930956	19980626 <-	
EP-----1001735	B1	20030319			
R: CH, DE, ES, FR, GB, IT, LI					
BR-----9900552	A	20000505	1998BR-000010552	19980626 <-	
GB-----2367749	A	20020417	2001GB-000027115	19980626 <-	
GB-----2367749	B	20020605			
ES-----2195357	T3	20031201	1998ES-000930956	19980626 <-	
ZA-----9805966	A	19990304	1998ZA-0005966	19980707 <-	
IN-----19980000096	A	20000103	1998IN-MA0000096	19980626 <-	
MV-----200000247	A	20041203	2000MX-00000247	20000105 <-	
US-----6306380	B1	20011023	2000US-000462331	20000407 <-	

PRAI 1997EP-000401638 A 19970709 <-  
1997GB-00002372 A 19970926 <-  
1999GB-0000235 A 19980626 <-  
1999GB-00001878 W 19980626 <-

AB The invention provides depilatory compns. comprising (a) a continuous aqueous phase; (b) a depilatory agent; and (c) an oil phase comprising (i) a non-polar oil separated from the continuous aqueous phase by a bilayer phase comprising 11-15% of a polar oil; and (ii) a polar oil which penetrates the composition and is substantially free from tertiary amines; processes for their preparation; and their use in degrading hair keratin. A depilatory cream contained cetostearyl alc. 8, Na Mg silicate 1, Ca(OH)2 0.5, urea 8, L-arginine 2, polyethylenimine 1, Mg trisilicate 0.5, titania 0.33, K thioglycolate 10, glycerol 10, water 0.5, perfumes 0.5, paraffin oils 3.5, propylene glycol 0.26, Acrysol 33 0.01, Ariamol E 1, ceteareth 20 3, and deionized water to 100 4.

ICM A61K-007/158

CC 62-4 (Essential Oils and Cosmetics)

IT 52-3-4, Crystalline biological studies 67-13-6, Urea, biological studies 68-13-1, Thioglycolic acid, biological studies 70-18-8, Glutathione, biological studies 70-49-5, Thiomalic acid 79-42-5, 2-Mercaptopropionic acid 96-27-5, Thiomycerol 107-83-5, Isohexane 101-96-6, 109-80-8, 3-(3-mercaptopropyl)-111-90-1, 126-97-6, Monothiobutanediol thioglycolate 147-93-3, Thiosalicic acid 261-31-4, Thiohexane 462-20-4, 6-hydroxypropionic acid 616-81-1, N-Acetyl-thioglycolate 758-08-7, Thioglycolamide 760-30-5, 834-71-1, Calcium thioglycolate 1200-22-2, Lipico acid 1310-61-8, Potassium thioglycolate 1312-3-8, Potassium thioglycolate 1312-82-2, Disodium salts, biological studies 1314-96-1, Potassium thioglycolate 3483-12-3, Dithioetheritol 5306-85-5, Dimethylsulfide 5421-46-5, Ammonium thioglycolate 6027-13-0, Homocysteine 6692-68-8, Dithioetheritol 7631-90-5, Sodium hydrogen sulfite 10034-93-2 12032-36-9, Magnesium sulfate 12135-76-1, Ammonium sulfate

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:682267 HCAPLUS

DN 129:320985

TI Depilatory compositions, their preparation and use

IN Gobin, Bruno; Ledon, Philippe; Canelas, Annick; Achter, David; Hemery, Severine; Thomas, Georges; Demont, Sarah; Belagnaud, Hubert

PA Reckitt &amp; Colman France, Fr.; Reckitt &amp; Colman Products Limited

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN,CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO-----9844889	A1	199801015	1998WO-GB0000950	19980330 <-
W:	AT, AU, BA, BE, BG, BR, BY, CH, CL, CN, CU, DE, DK, ES,				
DK, DE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,					
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,					
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TI,					
RW: UA, US, UZ, VN, YU, ZW					
FI, FR, GR, IE, IL, LU, MC, NL, PT, SE, BF, BJ, CG, CI, CM,					
GA, GN, ML, MR, NE, SN, TD, TG					
CA-----2286035	A1	199801015	1998CA-002286035	19980330 <-	
AU-----9868460	A	199801030	1998AU-000064640	19980330 <-	
AU-----9868460	B1	200001030			
EP-----973490	A1	200001026	1998EP-000913942	19980330 <-	
EP-----973490	B1	20030222			
R: CH, DE, ES, FR, GB, IT, LI					
BR-----9808503	A	20000523	1998BR-00008503	19980330 <-	
ES-----2195353	T3	20031201	1998ES-000913942	19980330 <-	
GB-----2323036	A	199801014	1998GB-000007190	19980406 <-	
GB-----2324036	A	200001014			
ZA-----9802940	A	19981109	1998ZA-000002940	1998020407 <-	
IN-----1998BMA01208	A	20050304	1998IN-MA0001208	19980603 <-	
MC-----9800358	A	200101001	1999MX-000009258	19991008 <-	

PRAI 1997EP-000400911 A 19970409 <-  
1997GB-000011447 A 19970604 <-

1999WO-GB0000950 W 19980330 &lt;-

AB A depilatory composition in the form of an aqueous gel comprises a substance capable of degrading hair keratin and a water-soluble polymer binder, and is referred to a pH of from 10.5 to 13.0. The polymeric binder is formed from a first component that is a charged crosslinked polymer and a second component that comprises a linear nonionic and/or charged polymer. The composition is preferably in the form of a stable gel that can be applied by means of a pump spray. A formulation example used Me vinyl ethylene anhydride copolymer (Antaron ST06), urea, and K thioglycolate.

ICM A61K-007/158

CC 62-4 (Essential Oils and Cosmetics)

IT Cosmetic; (depilatories; depilatory compns. containing hair keratin degrading agents and polymer binders);

IT Keratins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study, unclassified); PROX (Process); Polymers; depilatory compns. containing hair keratin-degrading agents and polymer binders;

IT Polyoxalkylenes, biological studies  
Polysaccharides, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses); (depilatory compns. containing hair keratin-degrading agents and polymer binders);

IT Sclerotium (gums from; depilatory compns. containing hair keratin-degrading agents and polymer binders);

IT 57-13-4, Urea, biological studies 62-56-6, Thisurea, biological studies 96-27-5, Thioglycol 111-90-0 2163-42-0 6892-68-8, Dithioetheritol 9000-07-1, Carrageenan 9000-30-0, Guar gum 9002-98-6 9003-39-8, Polyvinylpyrrolidone 9004-34-6, Cellulose, biological studies 9004-64-2, Hydroxypropyl cellulose 9005-26-8, Starch, biological studies 9005-26-8, Chlorophyll S106 2532-66-3, Polyethylene oxide 34452-51-2, Potassium thioglycolate 80455-45-4, Octyl hydroxyethyl cellulose 214685-56-0

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMATL42 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
12136-58-2, Lithium sulfide (Li2S) 13419-67-5 16721-80-5, Sodium hydrogen sulfide 17123-48-7, 20548-54-3, Calcium sulfide 21109-95-5, Potassium sulfide 2523-21-4, Polyisopropyl glycol stearyl ether 304-85-1, Potassium thioglycolate 37341-53-0, Keratinase 54266-38-3, Glycerol monothioglycolate 68223-93-8, Diammmonium dithioglycolate 84371-00-6 15865-84-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses); (mild depilatory cream compns. free of tertiary amines)

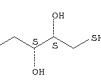
IT 3483-12-3, Dithioetheritol 6892-68-8, Dithioetheritol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses); (mild depilatory cream compns. free of tertiary amines)

RN 3483-12-3, HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

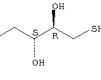
Relative stereochemistry.



RN 6892-68-8 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses); (depilatory compns. contg. hair keratin-degrading agents and polymer binders)

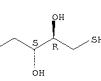
IT 6892-68-8, Dithioetheritol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses); (depilatory compns. containing hair keratin-degrading agents and polymer binders)

RN 6892-68-8 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

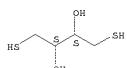
ALL CITATIONS AVAILABLE IN THE RE FORMAT



142 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 AN 1997:583282 HCAPLUS  
 12:27:26103  
 TI Preparation of hair constitution component with alkaline protease.  
 NL Nakanishi, Aki; Kon, Ryo; Takeuchi, Keiji  
 DA Jico Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN, CNT: 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
----- PI 1996JP-00058556	A	19970902	1996JP-00058556	19960221 <--
AB Hair is incubated with alkaline protease, a serine protease, of <i>Bacillus</i> origin, pH 7-11, in the presence of a reducing agent such as 2-mercaptoethanol, to deplete the keratin in cuticle and endocuticle and portion of hair shaft. In the absence of the reducing agent, the enzyme degrades endocuticle to obtain amino acid and peptide of endocuticle. Sonication can be optionally used to remove several layers of cuticle of the hair.				

### Relative stereochemistry.



 <b>IT</b> 50-81-7 Ascorbic acid, biological studies 56-87-1, L-Lysine, biological studies 57-13-4 Urea, biological studies 57-88-5, Cholesterin, biological studies 58-18-8 Vitamin B1, biological studies 58-66-6, Thiamine, biological studies 69-68-8 D-Mannitol 70-16-5, Glutathione, biological studies 71-00-1, Histidine, biological studies 74-79-3, Arginine, biological studies 97-59-6, Allantoin 331-39-5, Caffeic acid 1135-24-6, Ferulic acid 1406-18-4, Vitamin E 1406-40-6, Vitamin E, esters 3483-12-3, Dithiothreitol 7440-66-6D, Zinc salts 76-12-1, 800 mg, Vitamin B6 9001-48-3, Glutathione reductase 9004-61-9, Beta-alanide acid 9041-22-9D, $\beta$ -Glucan, derivs. 9041-92-3, 61-Antitrypsin 9054-89-1, Superoxide dismutase 3065-38-4 S6265-06-0	<b>IT</b> 50-81-7 (products-affecting compds.) <b>IT</b> 3483-12-3 (Dithiothreitol) <b>RL</b> : BUU (Biological use, unclassified); BIOL (Biological study); <b>USES (Uses)</b> (cosmetic compns. containing elastase inhibitors and Amadori products-affecting compds.) <b>IT</b> 3483-12-3 (Dithiothreitol) <b>RL</b> : BUU (Biological use, unclassified); BIOL (Biological study); <b>USES (Uses)</b> (cosmetic compns. containing elastase inhibitors and Amadori products-affecting compds.) <b>RN</b> 3483-12-3 HCAPUS <b>CN</b> 2,3-butandiol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)
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L42 ANSWER 21 OF 31 HCPLUS COPYRIGHT 2008 ACS on STN (Continued)

$$\text{HS}-\text{CH}_2-\text{S}(\text{OH})-\text{S}(\text{OH})-\text{CH}_2-\text{SH}$$

L42 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2008 ACS on SIM

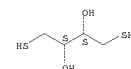
ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2008 ACS  
AN 1996:508725 HCAPLUS  
DN 129:144993  
TI Dyeing of peroxidase-immobilized fibers  
IN Amano, Jiro; Takeda, Keiji; Takagaki, Yutaka

PA Osaka Prefecture, Japan

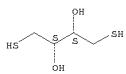
### Relative stereochemistry

L42 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2008 ACS ON STN  
 AN 1996:508725 HCAPLUS  
 DN 125144993  
 TI Dyeing of peroxidase-immobilized fibers  
 IN Asano, Jiro; Takeda, Keiji; Takegaki, Yutaka  
 PA Osaka, Japan; Japan; Toray Industries  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXZAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP----08127976	A	19960521	1992J-P-000165823	19920624 <-
PRAI 1992J-P-000165823		19920624	<-	
AB Peroxidase-immobilized fibers are impregnated with aqueous solns. containing reduced dyes, which are made insol by oxidation with H <sub>2</sub> O <sub>2</sub> . Thus, a polyester fiber is partially impregnated with aqueous solns. containing dithiobis(salicylic acid) solution and a solution of peroxidase modified by N-Succinimidyl 3-(2-pyridylidithio)propionate then dyed by 4-chloro-1-naphthol bath containing H <sub>2</sub> O <sub>2</sub> to give a produce of gray blue color gradation.				

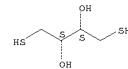


L42 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:340303 HCAPLUS  
 DN 124:352337  
 TI Hair preparations containing protease-bound carriers  
 IN Jpn, Kenji; Usui, Toshihiro  
 PA Kanebo Ltd., Japan  
 SO Jpn. Kokai Tokyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 PAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 -----  
 PI JP-A-0059438 A 19960303 1994JP-000211757 19940408 <--  
 PRAI 1994P-000211757 I  
 AB Hair preps., which increase hair-bound antibodies against hair keratin and give smoothness and flexibility to the hair, contain protease (e.g. thiol protease)-bound carriers and optional reducing agents. A hair treatment was prepared from NaHSO3 25, cetanol 50, glycerin monostearate 20, propylene glycol 60, H2O 845 g, and agarose-papain 1000 units.  
 ICN A61K-007/06  
 ICA A61K-038/46  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT Acetophenetidines  
 RL: BPR (Biological preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)  
 (to hair keratin; hair preps. containing protease-bound carriers and reducing agents with hair-bound antibody-increasing effect)  
 IT 3483-12-3 Dithiothreitol 7631-90-5; Sodium hydrosulfite; RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hair preps. containing protease-bound carriers and reducing agents with hair-bound antibody-increasing effect)  
 IT 3483-12-3 Dithiothreitol  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hair preps. containing protease-bound carriers and reducing agents with hair-bound antibody-increasing effect)  
 RN 3483-12-3 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)  
 Relative stereochemistry.



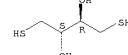
L42 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:155638 HCAPLUS  
 DN 124:185184  
 TI Desquamation compositions containing sulphydryl compounds and zwitterionic surfactants  
 IN Bisset, Donald Lynn  
 PA Procter and Gamble Co., USA  
 SO PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 PAN.CNT 1  
 PATENT NO. KIND DATE APPLICATION NO. DATE  
 -----  
 PI WO----S9601101 A1 19960118 1995WO-US0008136 19950629 <--  
 W: AU, BB, BG, BR, CA, CH, CZ, EE, FI, GE, HU, IS, JP, KG,  
 KP, KR, KZ, LK, LR, LZ, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU,  
 SG, SI, SK, TJ, TI, UA, UZ, VN  
 RW: KE, MW, SD, SZ, US, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, II,  
 LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,  
 NG, SL, TD, TG  
 CA----2194158 A1 19960118 1995CA-002194158 19950629 <--  
 CA----2194159 C 20000822  
 AU----S9529514 A 19960125 1995AU-000029514 19950629 <--  
 AU----703079 B2 19990311  
 EP----888466 A1 19960123 1995EP-000925348 19950629 <--  
 EP----764666 B1 20000410  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IZ, LI, LU, NL, PT, SE  
 CN----1154652 A 19970717 1995CN-000194450 19950629 <--  
 CN----2194159 B 20000822  
 CN----1107495 B 20030507  
 JP----102506 I 19950629 1995JP-000502910 19950629 <--  
 AT----215810 T 199502415 1995AT-000925348 19950629 <--  
 EG----2174951 T3 20021111 1995ES-000925348 19950629 <--  
 TW----402500 B 20000821 1995TW-084108533 19950816 <--  
 PRAI 1994US-000269745 A 19940701 <--  
 ICA A61K-007/48  
 OS MARPAT 124:185184  
 AB The subject invention relates to desquamation compns. comprising a combination of certain sulphydryl compds. and certain zwitterionic surfactants. The subject invention further relates to methods of desquamation, i.e., removing the superfluous skin, skin and tissue scales. A topical composition containing methionine 0.66, cetylbetaisobutanoate 6.66, di->Na EDTA 0.01 ethanol (95%) 40.00, N-acetyl-L-cysteine 2.00, and water to 100% was applied to the face to remove scales at a dose enough to deposit 2 mg of the composition per cm<sup>2</sup> skin, once a day.  
 ICN A61K-007/48  
 ICA A61K-038/46; A61K-031/05; A61K-031/60  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 IT Acne  
 Cosmetics  
 Skin  
 (desquamation compns. containing sulphydryl compds. and zwitterionic surfactants)  
 IT 63-68-3, Methionine, biological studies 69-72-7, Salicylic acid, biological studies 70-18-8, Glutathione, biological studies 616-91-1, N-acetyl-L-cysteine 60-20-4, Cetylacetate 620-66-6 3483-12-3, Dithiothreitol 6027-13-4, Homocysteine 6892-68-8, Dithioerythritol 7425-12-9 26920-62-7  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (desquamation compns. containing sulphydryl compds. and zwitterionic surfactants)  
 RN 3483-12-3 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)  
 Relative stereochemistry.

L42 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:244477 HCAPLUS  
 DN 124:345858  
 TI Determination of keratinthiol and inherent thiol after reductive treatment of wool  
 AU Gattner, Hans-Gregor; Naithani, Vinod Kumar  
 CS Deutsches Wollforschungsinstitut, RWTH Aachen e. V., Germany  
 SO DMT Reports (1996), 117(Aachener Textilltagung, 1995), 493-7  
 COEN: DWIREC  
 PB Deutsches Wollforschungsinstitut an der Technischen Hochschule Aachen  
 DT Journal  
 LA German  
 AB A polarogr. method was described for determination of residual unreacted thiols after reductive treatment of wool with mercaptan reducing agents. Polarographic analysis (I) carried out in the wool after washing was remeasured with alkaline buffer in sil. The bath may then be determined polarogr. The other standard reducing agent used, Cleland's reagent, was readily removed from the partially reduced wool with water.  
 CC 40-3 (Textiles and Fibers)  
 IT Keratin  
 RL: PEP (Physical, engineering or chemical process); PROC (Process) (determination of thiol content from unreacted reducing agent in wool treatment)  
 IT 62-11-1, Thiomalic acid, uses 3483-12-3, Cleland's reagent  
 RL: (Analyte); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)  
 (determination of thiol content from unreacted reducing agent in wool treatment)  
 IT 3483-12-3, Cleland's reagent  
 RL: (Analyte); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)  
 (determination of thiol content from unreacted reducing agent in wool treatment)  
 RN 3483-12-3 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)  
 Relative stereochemistry.



L42 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 6892-68-8 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)  
 Relative stereochemistry.





L42 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1994:572908 HCAPLUS  
 DN 121:172908  
 TI Hair analysis  
 IN Biuroszka, Werner A.  
 PA Psychomedics Corporation, USA  
 SO PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FN/CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
 PI WO-----9418561 A1 19940818 1994WO-U50001137 19940201 <-  
 W: DE, DK, SE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 RN: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 US: -5466579 A 19951114 1993US-00001724 19930203 <-  
 EP:-----634014 A1 19950111 1994EP-00091798 19940201 <-  
 EP:-----634014 B1 19991229 19940201 <-  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 JP: 07-0748099 I 199507 1994JP-000518154 19940201 <-  
 JP:-----3424828 B2 200307 19940201 <-  
 AT:-----182892 T 20000115 1994AT-000907938 19940201 <-

PRAI 1993US-000012724 A 19930203 <-  
 1993US-000012715 B2 19871228 <-  
 1998US-000215591 B2 <-  
 1998US-000285123 A2 19881216 <-  
 1991US-000737703 A2 19910730 <-  
 1994WO-U50001137 W 19940201 <-  
 AB A method for determining direct and/or analyte indicative of marijuana exposure found in keratinized structures, e.g., hair, fingernails and toenails, which comprises preparing of a mixture containing dithiothreitol or dithioerythritol, a protease suitable for the digestion of the keratin structure and a sample of the keratin structure; permitting the enzyme to least substantially digest the sample of keratin structure to form a digest solution; removing by mixing the digest solution with a suspension of an ion exchange resin to remove an interfering, cross reacting substance naturally found in hair and finally subjecting the digest solution to anal. to determine the identity and amount of marijuana analyte in the keratin structure sample. To account for the method cupric sulfate may be added to the mixture after degradation of the keratin sample in order to deactivate the activator. The enzyme may be a protease with papain, chymopapain, and proteinase K being preferred for use in the invention. Exemplary ion exchange resins useful in the method according to the invention are DEAE Sephadex (diethylaminoethyl Sephadex) and DEAE Sepharose (Diethylaminoethyl Sepharose).

IC ICM GO/N-03/53

CC 4-2 (Toxicology)

IT 3483-12-3, Dithiothreitol 6892-68-8, Dithioerythritol  
 77-77-7, Cupric sulfate 778-46-5, Sodium arsenite 8001-09-6,  
 Chymopapain 8001-73-4, Papain 9001-92-7, Proteinase 9064-92-0, DEAE Sephadex 39450-01-6, Proteinase K 5707-08-6, DEAE Sepharose

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(drug determination in human hair by RIA)

IT 3483-12-3, Dithiothreitol 6892-68-8, Dithioerythritol

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(drug determination in human hair by RIA)

RN 3483-12-3 HCAPLUS

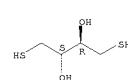
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

L42 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 6892-68-8 HCAPLUS  
 CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.



L42 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1992:421485 HCAPLUS  
 DN 117:21485  
 TI Method for determining source of biological material, especially hair, by using in situ hybridization

IN Molecular Biology Dept; Nelson, Gordon; Hamlyn, Paul  
 PA British Textile Technology Group, UK  
 SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

FN/CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE  
 PI WO-----9117263 A1 19911114 1991WO-G80000575 19910411 <-  
 W: AU, BB, BG, BR, CA, FI, HU, JP, KR, LK, MC, MG, MW, NO, PL  
 RO, SD, SU, US  
 RN: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, GR, IT,  
 LU, ML, MR, NL, SE, SN, TD, TG

AU:-----9176731 I 19911121 1991AU-000076731 19910411 <-  
 EP:-----91000574 A1 19910414 1991EP-00096073 19910411 <-  
 EP:-----917784 B3 19960821

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

JP:-----0596575 I 19930930 1993JP-000507506 19930411 &lt;-

AT:-----141652 I 19960915 1991AT-00096073 19910411 &lt;-

PRAI 1990GB-0000093 A 19900411 &lt;-

1991WO-CB0000575 A 19910411 &lt;-

AB A method for determining the source of biol. materials comprises in situ hybridization using species-specific RNA or DNA probes.

ICM C1Q-001/68

IUS: 60-00-4

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 9

IT Keratins

RL: BIOL (Biological study)

(gene or mRNA for, in situ hybridization of, species identification by)

IT Fur

Hair

(source of, determination of, in situ hybridization for)

IT 57-13-6, Urea, uses 60-00-4, EDTA, uses 60-24-2, 2-Mercaptoethanol 61-88-9, DNA, conjugates with DNA or RNA 61-54-5/61-54-2D, Dansyl chloride, conjugates with DNA or RNA 3181-56-6/3181-56-7, 2231-07-5D, Fluorescein, conjugates with DNA or RNA 3483-12-3, Dithiothreitol 9001-92-7, Proteinase 27599-63-9D, Fluoresceinamine, conjugates with DNA or RNA 38183-12-5D, Fluorescamine, conjugates with DNA or RNA 107347-93-5D, conjugates with DNA or RNA

RU: 107347-93-5D

(in hair or fur source determination by in situ hybridization)

IT 3483-12-3, Dithiothreitol

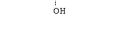
RL: USES (Uses)

(in hair or fur source determination by in situ hybridization)

RN 3483-12-3 HCAPLUS

CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



L42 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1987:172318 HCAPLUS  
 DN 106:172318  
 OREP 106:27905a, 27908a

TI Electrophoretic variability in human head hair: polyacrylamide gel electrophoresis of hair proteins in the presence of sodium dodecyl sulfate and urea

AU Gerhard, Michael

CS Abt. Kriminaltech. Landeskriminalamt Niedersachsen, Hannover, D-3000/1,

SO Electrophoresis (1987), 8(3), 153-7

CODEN: ELCETN; ISSN: 0173-0835

DT Journal

LA English

AB A fast and simple procedure for routine typing of human head hair is described. Hair proteins, extracted in a solution containing SDS, urea, and dithiothreitol were separated electrophoretically in the presence of 6M urea. On examination of hair from 445 different individuals, 8 characteristic polypeptide patterns (phenotypes) could be distinguished and were arbitrarily named, K1, K2 and K3 occurred most frequently, specifically, K1 was found in 144 individuals, K2 in 130 and K3 in 101. The 8 phenotypes are characterized by the different numbers and patterns of major polypeptide bands in the range 45-60 kilodaltons. Based on the high reproducibility it can be assumed that a given phenotype is specific for the head hair of an individual. Electrophoretic protein typing thus promises to be a promising tool for hair anal. in genetic and forensic investigation.

CC 9-7 (Biochemical Methods)

Section cross-reference(s): 4, 13

IT Keratins

PROC (Process)

(electrophoresis of, gel, of human hair)

IT 97-13-6, Urea, uses and miscellaneous 151-21-3, SDS, uses and miscellaneous 3483-12-3

RL: USES (Uses)

(in gel electrophoresis of human hair proteins)

IT 3483-12-3

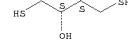
RL: USES (Uses)

(in gel electrophoresis of human hair proteins)

RN 3483-12-3 HCAPLUS

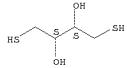
CN 2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



L42 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1981:193718 HCAPLUS  
 DN 94:193728  
 OREF 94:31705a,31706a  
 TI The mechanism of origin of some concealed defects in raw furs  
 AU Shklandov, I. S.  
 CS Leningr. Inst. Sov. Torg., Leningrad, USSR  
 SO Kozhevenco-Obuvnaya Promshlennost (1981), 23(1), 11-14  
 COGEN: KOOPA/J; ISSN: 0023-4354  
 DE English  
 LA Russian  
 AB Concealed defects (skin breaks, yellowing, bald spots) in raw rabbit skins during dressing are caused by collagenase (I) (9001-12-1) and peroxidase. I is most effective in attacking young connective tissue whose collagen contains few crosslinks. Collagenolytic proteolytic enzymes can be activated by EDTA (60-00-4), cysteic acid (13100-82-8), chelates, o-phenanthroline (66-71-7) or dithiothreitol (3483-12-3). Alternatively, rabbit skins can be retanned by HCHO (50-00-0), which increases the number of crosslinks in collagen.  
 CC 41-1 (Leather and Related Materials)  
 Section cross-reference(s): 13  
 IT Hide  
 (rabbit, defect prevention in)  
 IT Tanning  
 (tanning, of rabbit skins, with formaldehyde for defect prevention)  
 IT 60-00-4, uses and miscellaneous 66-71-7 3483-12-3 13100-82-8  
 RL: USES (Uses)  
 (inhibitors, for collagenase for rabbit hide defect prevention)  
 IT 50-00-0, uses and miscellaneous  
 RL: USES (Uses)  
 (retanning by, of rabbit skins for defect prevention)  
 IT 3483-12-3  
 RL: USES (Uses)  
 (inhibitors, for collagenase for rabbit hide defect prevention)  
 RN 3483-12-3 HCAPLUS  
 CN 2,3-Butenediol, 1,4-dimercapto-, (2R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.



=> => d his

(FILE 'HOME' ENTERED AT 14:46:05 ON 08 APR 2008)

FILE 'HCAPLUS' ENTERED AT 14:46:51 ON 08 APR 2008  
L1 1 US20070124868 /PN

FILE 'REGISTRY' ENTERED AT 14:47:16 ON 08 APR 2008

FILE 'HCAPLUS' ENTERED AT 14:47:16 ON 08 APR 2008  
L2 TRA L1 1- RN : 5 TERMS

FILE 'REGISTRY' ENTERED AT 14:47:16 ON 08 APR 2008  
L3 5 SEA L2

FILE 'CASREACT' ENTERED AT 14:49:58 ON 08 APR 2008  
L4 0 L1  
L5 STR  
L6 0 L5  
L7 STR L5  
L8 0 L7  
L9 0 L7 FULL

FILE 'REGISTRY' ENTERED AT 17:32:00 ON 08 APR 2008  
L10 STR  
L11 0 L10 SAM  
L12 71 L10 FULL  
SAV TEM J714C1G1/A L12  
L13 0 L12 AND L3

FILE 'HCAPLUS' ENTERED AT 17:36:27 ON 08 APR 2008  
L14 6402 L12  
L15 105 L12 (L) (PREP+NT OR FORM+NT) /RL  
E HIDE/CT  
E E3+ALL  
L16 8123 E1+OLD  
L17 12838 E3-9/BI  
E FUR/CT  
E E3+ALL  
L18 3044 E6+OLD  
L19 12247 E8-11/BI  
E HIDE POWDER/CT/  
E HIDE POWDER/CT  
E E3+ALL  
L20 332 E5  
E HIDE PROCESSING/CT  
E E3+ALL  
E LEATHER/CT  
E E3+ALL  
L21 25319 E1  
E SKIN/CT  
E E3+ALL  
L22 129101 E4+OLD, NT  
E E20+ALL  
L23 14613 E7  
L24 20804 E8-11/BI  
L25 1 L15 AND L16-23  
L26 92 L14 AND L16-23  
L27 44 L26 AND L12 (L) USES+NT/RL  
L28 43 L14 AND L24  
L29 23 L28 AND L12 (L) USES+NT/RL  
L30 48 L27, L29  
QUE PD<=20041112 OR AD<=20041112 OR PRD<=20041112  
L32 QUE PD<=20031112  
L33 QUE PD<=20031117  
L34 QUE PD<=20031117 OR AD<=20031117 OR PRD<=20031117  
L35 36 L30 AND L31, L34  
L36 29 L35 AND L32-33  
L37 1 L25 AND L31, L34

L38            7 L35 NOT L36  
              SEL HIT RN

FILE 'REGISTRY' ENTERED AT 17:50:56 ON 08 APR 2008  
L39            2 E1-2

FILE 'HCAPLUS' ENTERED AT 17:51:18 ON 08 APR 2008  
              SEL HIT RN L36

FILE 'REGISTRY' ENTERED AT 17:52:05 ON 08 APR 2008  
L40            2 E3-4

FILE 'HCAPLUS' ENTERED AT 17:52:25 ON 08 APR 2008  
              SEL AN DN L38 6-7  
L41            2 E5-10 AND L38  
L42            31 L36, L41  
L43            5068 L14 AND L32-33  
L44            4995 L43 NOT L25-30, L35-38  
              SEL HIT RN L44

FILE 'REGISTRY' ENTERED AT 17:58:00 ON 08 APR 2008  
L45            50 E11-60  
L46            25 L45 NOT (PMS OR MXS)/CI  
L47            22 L46 NOT (D OR FE)/ELS  
L48            18 L47 NOT (C4H1006S2 OR C18H22O6S2 OR C4H604S2)  
L49            17 L48 NOT COMPD  
L50            16 L49 NOT C4H1008S2

FILE 'HCAPLUS' ENTERED AT 18:05:37 ON 08 APR 2008  
L51            4971 L50 AND L44  
L52            7468 L16 AND PD<=20021117  
L53            379 L52 AND PIGSKIN  
L54            307 L53 AND L16 (L) PIGSKIN?  
L55            191 L54 AND 45/SC, SX  
L56            1 L55 AND MANTLE MICROSTRUCTURE?/TI  
L57            17 L55 AND ENG/LA